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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/734,491	12/11/2003	Maksim Ioffe	NVID-078/00US 140060-2153	1636

23419 7590 04/30/2008

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EXAMINER	
WHIPPLE, BRIAN P	
ART UNIT	**PAPER NUMBER**
2152	

MAIL DATE	DELIVERY MODE
04/30/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/734,491	IOFFE ET AL.	
	Examiner	Art Unit	
	Brian P. Whipple	2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 April 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14,16,18 and 20-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14,16,18 and 20-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-14, 16, 18, and 20-23 are pending in this application and presented for examination.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/16/08 has been entered.

Response to Arguments

3. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a

person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-14, 16, 18, and 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tripunitara et al. (Tripunitara), U.S. Patent No. 6,771,649 B1, in view of what was well known in the art at the time of the invention, and further in view of Razzaghe-Ashrafi et al. (Razzaghe), U.S. Patent No. 6,202,169 B1.

6. As to claim 1, Tripunitara discloses a method of using a networking subsystem to prevent spoofing of an address resolution cache of the host computer (Col. 3, ln. 3-14), the method comprising:

said networking subsystem receiving an unsolicited message from a network that submits a new address resolution for a network protocol address (Col. 5, ln. 33-35 and 53-55);

said networking subsystem checking independently cached address resolution information associated with the host computer (Col. 2, ln. 19-24; Col. 5, ln. 34-46);

in response to determining that cached address resolution information for said network protocol address has an old address resolution which differs from said new address resolution submitted by said unsolicited message (Col. 5, ln. 51-53 and 65-67), said networking subsystem issuing a request for network elements having said network protocol address to reply with address resolution information (Col. 5, ln. 46-55; Col. 6, ln. 10-31) in

order to check the authenticity of the unsolicited message submitting the new address resolution for the network protocol address (Col. 3, ln. 3-14; Col. 5, ln. 31-33);

in response to determining that no reply messages confirm that a network element has said old address resolution (Col. 5, ln. 32-40), said networking subsystem permitting at least one message to pass onto said host computer which includes said new address resolution (Col. 5, ln. 32-40); and

in response to receiving a reply message that confirms a network element has said old address resolution (Col. 5, ln. 46-55), said networking subsystem blocking at least one message which include said new address resolution from passing onto said host computer (Col. 5, ln. 41-46);

wherein said networking subsystem protects said host computer from spoofed address resolution messages (Col. 1, ln. 19-31; Col. 2, ln. 19-24).

Tripunitara may be interpreted as disclosing a firewall, as a “dynamic packet filter” is shown in Fig. 2. However, Tripunitara does not use the term “firewall.” Tripunitara is silent on a firewall being resident on the host computer.

Official Notice (see MPEP 2144.03, Reliance on "Well Known" Prior Art) is taken that it was well known in the art to get the advantage of providing an extra layer of security for host computers without the need for installing an external component to act as a firewall by

using a local firewall. It was well known in the art to include the functions of a firewall on a host computer.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Tripunitara by using a local firewall to gain the advantage of this well known feature.

Applicant has argued that Tripunitara does not truly disclose an unsolicited message being accepted when valid and instead simply blocks it.

However, Razzaghe discloses in response to determining that cached address resolution information for said network protocol address has an old address resolution which differs from said new address resolution submitted by said unsolicited message (Abstract; Col. 5, ln. 25-33; Col. 9, ln. 5-9), the unsolicited message submitting the new address resolution for the network protocol address (Abstract; Col. 5, ln. 25-33; Col. 9, ln. 5-9).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Tripunitara and what was well known in the art at the time of the invention by accepting unsolicited messages when valid as taught by Razzaghe in order to allow unsolicited, but valid ARP information to be implemented (Razzaghe: Abstract; Col. 5, ln. 25-33; Col. 9, ln. 5-9).

7. As to claim 2, Tripunitara, what was well known in the art, and Razzaghe disclose the invention substantially as in parent claim 1, including said network implements a LAN network running Internet Protocol using the Address Resolution Protocol (ARP) for resolving medium access control (MAC) addresses, and said address resolution cache is an ARP cache mapping IP addresses to MAC addresses (Tripunitara: Col. 3, ln. 15-37).

Tripunitara does not explicitly define the use of IPv4. However, Official Notice is taken that IPv4 was extremely well known in the art and the standard for IP communications in LAN and Internet communications.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Tripunitara by using the well known IPv4 in order to implement a pre-defined standard for network communications, for the purpose of maximizing the compatibility with other networking elements.

8. As to claim 3, the claim is rejected for reasons similar to claim 2 above. IPv6 with Neighbor Discovery was extremely well known in the art. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Tripunitara by using IPv6 with Neighbor Discovery in order to implement a pre-defined standard for network communications, for the purpose of maximizing the compatibility with other

networking elements, and in order to add the capacity for a greater number of host addresses and the greater security of IPv6.

9. As to claims 4, 7-8, and 10-11, the claims are rejected for reasons similar to claim 1 above.

10. As to claims 5 and 13, the claims are rejected for reasons similar to claim 2 above.

11. As to claims 6 and 14, the claims are rejected for reasons similar to claim 3 above.

12. As to claim 9, Tripunitara, what was well known in the art, and Razzaghe disclose the invention substantially as in parent claim 4, including storing cache entries with a residency lifetime greater than in said address resolution cache (Tripunitara: Col. 5, ln. 65 – Col. 6, ln. 3) of said host computer (Tripunitara: Col. 3, ln. 3-14).

13. As to claim 12, the claim is rejected for reasons similar to claim 9 above.

14. As to claims 16, 18, and 20, the claims are rejected for reasons similar to claim 1 above. It is well known in the art to include the functions of a firewall on a host computer, and therefore, on the chipset of a host computer.

15. As to claims 21-23, the claims are rejected for reasons similar to claim 9 above.

Conclusion

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian P. Whipple whose telephone number is (571)270-1244. The examiner can normally be reached on Mon-Fri (9:30 AM to 6:00 PM EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on (571) 272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Brian P. Whipple
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Examiner, Art Unit 2152
4/27/08

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